

Managing Excess Vaccines

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How Should I Manage Excess Vaccines?

Depending on vaccine ingredients, discarded vaccines may be infectious waste, hazardous waste or non-hazardous solid waste (regular trash).

Vaccines that may be infectious waste when discarded

As of August 14, 2007, the following vaccines that contain live attenuated virus are infectious waste when discarded, according to the Wisconsin Division of Public Health:

- Influenza 2006/7 Formula — only FluMist®
- MMR — M-M-R® II
- MMR-Varicella — ProQuad®
- Rotavirus — RotaTeq®
- Typhoid Fever — only Vivotif®
- Varicella Zoster — Varivax® and Zostavax®

Here are your options for managing excess live virus vaccine:

- Contact the manufacturer (MedImmune for FluMist®, Berna Biotech for Vivotif® and Merck for all others) to see if it can be returned for proper management. For excess live virus vaccine that is not returned to the manufacturer, see the following options.

- Send it to an infectious waste treatment facility for disinfection and subsequent management as regular trash. (Lists of infectious waste transporters are available at dnr.wi.gov/org/aw/wm/faclists); or
- Disinfect it yourself according to ss. NR 526.11 and 526.12, Wis. Adm. Code (www.legis.state.wi.us/rsb/code/nr/nr526.pdf). Be sure to keep records. Manage the disinfected vaccine as regular trash.

Vaccines that may be hazardous waste when discarded

Some vaccines are preserved with 1:10,000 or 0.01 percent Thimerosal (see the vaccines in the table titled "Thimerosal Content in Some U.S. Licensed Vaccines" at www.vaccinesafety.edu/thi-table.htm that have .01% in the Thimerosal Concentration column). Thimerosal contains about 50 percent mercury by weight. Vaccines with 1:10,000 or 0.01 percent Thimerosal have about 50 mg/L mercury, which exceeds the 0.2 mg/L hazardous waste toxicity characteristic regulatory level for mercury. According to state and federal hazardous waste management requirements, discarded Thimerosal-preserved vaccines may need to be managed as hazardous waste, using the waste code D009 (mercury).

NOTE: One mercury-containing fever thermometer contains the same amount of mercury (1/2 gram) as 20,000 adult doses of Thimerosal-preserved vaccine. While bulk mercury (e.g., in a mercury fever thermometer) is a bigger threat to human health and the environment compared to a Thimerosal-preserved vaccine, it is still important to manage these discarded vaccines properly.

It is illegal to manage Thimerosal-preserved vaccines as infectious waste or regular trash.

Here are your options for managing excess Thimerosal-preserved vaccines:

- Ship *unexpired* vaccines to the manufacturer for use or proper management (with prior permission from the manufacturer),
- Manage the vaccines under the state of Wisconsin hazardous waste management contract,
- Transport the vaccines to a Wisconsin very small quantity generator (VSQG) hazardous waste collection facility, or
- Contract directly with a hazardous waste management company to manage the vaccines.

There is detailed information on these options below. Please review the information carefully as all of the options have conditions and one option may be **required** for certain generators.

Vaccines that are non-hazardous solid waste when discarded

Except for live virus vaccines and Thimerosal-preserved vaccines, all other vaccines should be non-hazardous solid waste when discarded. (See the above list of live virus vaccines. See the list at www.vaccinesafety.edu/thi-table.htm for Thimerosal-preserved vaccines.) You may manage these other discarded vaccines with your regular trash.

Options for Managing Excess Thimerosal-Preserved Vaccines

Please read these options carefully, as they all have conditions and one option may be **required** for certain generators.

OPTION 1. Ship unexpired vaccines to the manufacturer for use or proper management (with prior permission from the manufacturer)

Vaccines managed under this option are not regulated in Wisconsin as solid or hazardous waste. To use this option, the vaccines **MUST NOT** have expired. (*Expired* Thimerosal-preserved vaccines are regulated as hazardous waste and should be managed under options 2 to 4.)

Contact the manufacturer to see if this option is available for your *unexpired* vaccine and under what conditions. We strongly recommend you check into how the manufacturer will manage the returned

vaccines to minimize your organization's liability for any environmental contamination caused by managing the vaccines. Shipments should comply with any applicable U.S. Department of Transportation (U.S. DOT) Hazardous Materials Regulations. For information on those regulations, go to hazmat.dot.gov or call (608)829-7530 (Madison) or (800)467-4922.

OPTION 2. Manage the vaccines under the state of Wisconsin hazardous waste management contract

General

All state of Wisconsin agencies, institutions and campuses (e.g., UW-Madison and UW System) that do not use option 1 are **required** to use the state contract. Additionally, Wisconsin municipalities **may** use the state contract.

NOTE: "Municipality" is broadly defined at vendornet.state.wi.us/vendornet/procman/prod30.asp

Information on the state contract is available at vendornet.state.wi.us/vendornet/asp/ContractDetail.asp?SystemContractNumber=1823

Transportation requirements

If you use the state contract and you are a Wisconsin VSQG of hazardous waste, you may self-transport your hazardous waste to the contractor, without a hazardous waste transportation license and EPA identification number, and without otherwise complying with the hazardous waste transporter standards in ch. NR 663, Wis. Adm. Code.

NOTE: Find a definition of VSQG on p. 2 of www3.uwm.edu/Dept/shwec/publications/cabinet/pdf/720bb9612.pdf and in ch. NR 662.220, Wis. Adm. Code, at www.legis.state.wi.us/rsb/code/nr/nr662.pdf.

Before considering self-transport, you should get permission from your agency's, institution's or campus' risk management and fleet programs.

Transporters should also comply with any applicable U.S. DOT Hazardous Materials Regulations. For information on those regulations, go to hazmat.dot.gov or call (608)829-7530 (Madison) or (800)467-4922. While the regulations don't apply to transportation of hazardous material in a motor vehicle operated by a government employee only for noncommercial government purposes, we recommend following the regulations as a good management practice.

OPTION 3. Transport the vaccines to a Wisconsin VSQG Hazardous Waste Collection Facility

If you are not required to use option 2, you may use this option if:

- you are a Wisconsin VSQG (see option 2, 2nd Note); and
- if you self-transport your hazardous waste vaccines to a Wisconsin VSQG collection facility, you should comply with the transportation requirements in option 2.

NOTE: Contact a VSQG collection facility near you for information on acceptance of hazardous waste and costs for managing it. A list of Wisconsin VSQG collection facilities is available at www.uwex.edu/erc/pdf/HHW/VSQGAddress.pdf

If you self-transport your hazardous waste vaccines without a hazardous waste transportation license to a Wisconsin VSQG collection facility, you should comply with the transportation requirements in option 2. The VSQG collection facility is required to give you a shipment receipt, including:

- your company's name and location, including street address, city and state;
- the quantity and type of waste; and
- the date the waste was accepted by the collection facility.

While it isn't currently required, we recommend that you keep these receipts for at least three years after the waste acceptance date.

OPTION 4. Contract directly with a hazardous waste management company to manage the vaccines

You may use this option if you are not required to use option 2.

NOTE: A fact sheet "Off-site Disposal of Hazardous Wastes: Choosing the Right Treatment, Disposal Facility and Hazardous Waste Hauler" is available at www.uwex.edu/ces/ag/sus/sbdc/pdftocdt/AB2_4.pdf

Lists of licensed Wisconsin hazardous waste transporters are available at dnr.wi.gov/org/aw/wm/faclists

If you are a Wisconsin VSQG and you self-transport your hazardous waste vaccines to a hazardous waste management company, you should comply with the transportation requirements in option 2.

More Information on Hazardous Waste Management Requirements

See Wisconsin's hazardous waste guidance at dnr.wi.gov/org/aw/wm/publications

See Wisconsin's hazardous waste management rules at www.legis.state.wi.us/rsb/code/nr/nr600.html

Call the DNR "Other Hazardous Waste Requirements" contact person for the county in which you are located. A list of contacts can be found at dnr.wi.gov/org/aw/wm/contacts/hazard.htm.

Alternatively, call the Waste and Materials Management Program general number at (608)266-2111 to have your call redirected.

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